

CLAIMS

What is claimed is:

- 1 1. A public switched telephone network device comprising:
2 a first subsystem;
3 a second subsystem;
4 a module coupled to the first subsystem and the second subsystem, whereby the
5 module receives outbound messages from the first subsystem and if the destination for
6 the message, is the second subsystem, converts the outbound message to an inbound
7 message.
- 1 2. The public switched telephone network device of Claim 1 wherein:
2 said module routes an inbound message to a subsystem designated as the
3 destination subsystem in the message.
- 1 3. The public switched telephone network device of Claim 1 wherein:
2 the network device is a service control point.
- 1 4. The public switched telephone network device of Claim 1 wherein:
2 the outbound and inbound messages are signaling system seven messages.
- 1 5. The public switched telephone network device of Claim 1 wherein:
2 the module reroutes the outbound message directly to the second subsystem.

1 6. The public switched telephone network device of Claim 1 wherein:
2 the module checks the destination of the outbound message and then converts the
3 message into an inbound message.

1 7. The public switched telephone network device of Claim 6 wherein:
2 the module checks the destination of the outbound message by checking the
3 destination point code contained in the message.

1 8. The public switched telephone network device of Claim 1 further comprising:
2 a memory storing an inbound message.

1 9. The public switched telephone network device of Claim 1 further comprising;
2 a computer processor in which said first and second subsystems and said module
3 operate.

1 10. The public switched telephone network device of Claim 1 further comprising;
2 a first computer processor in which said first subsystem and said signaling system
3 seven module operate, and
4 a second computer processor in which said second subsystem and said signaling
5 system seven module operate.

1 11. A public switched telephone network comprising:
2 a plurality of service control points,

3 a plurality of subsystems operating in each service control point, and
4 means for internally routing signaling system seven messages from subsystems in
5 a service control point to other subsystems in the same service control point.

1 12. The public switched telephone network according to Claim 11 wherein:
2 said subsystems residing in each service control point are selected to maximize
3 the likelihood that outbound messages from a subsystem will have another subsystem in
4 the same service control point as the destination subsystem.

1 13. The public switched telephone network according to Claim 12 further comprising:
2 a 911 service subsystem and a position determining entity subsystem residing at
3 the same service control point.

1 14. A method for managing messages in a network device having a plurality of
2 subsystems comprising:
3 checking the destination subsystem identified in an outbound message and, if the
4 destination subsystem resides in the network device, internally rerouting the message to
5 the destination subsystem.

1 15. The method of Claim 14 wherein the messages are signaling system seven
2 messages.

1 16. The method of Claim 15 further comprising:

2 comparing the point code of the destination subsystem to the point code of the
3 subsystem sending the outbound message.

1 17. The method of Claim 16 further comprising:
2 using a routing table to determine the point code of the outbound message based
3 on the subsystem number of the destination subsystem.

1 18. The method of Claim 14 further comprising:
2 converting the outbound message to an inbound message.

1 19. A method for managing messages in a network device having at least two
2 subsystems comprising:
3 coupling an inbound message to a memory and to a first subsystem designated as
4 the destination subsystem in the inbound message,
5 processing said inbound message with said first subsystem and updating the
6 message stored in said memory to include the results of said processing,
7 using the stored and updated message to send an outbound message from said
8 first subsystem to a second subsystem.

1 20. The method of Claim 19 further comprising;
2 comparing the network location of said first subsystem to the network location of
3 said second subsystem, and if said locations are the same, internally routing said
4 message to said second subsystem.

1 21. The method of Claim 20 further comprising:
2 using a routing table to identify the point code of said second subsystem.

1 22. The method of Claim 20 further comprising:
2 converting said outbound message to an inbound message.